

IN THE CLAIMS

Please amend claims 1, 8-12, 19, 20 and 22 and cancel claims 3-6, 14-17 and 21 as follows:

1. (Currently Amended): A method for obtaining data stored in a non-volatile memory and data stored in volatile memory in a facility monitoring system, comprising:
 - sending a first data request message from a client computer to a database computer server requesting data, the first data request message having a list of segment identifiers, a start date and time, and an end date and time;
 - retrieving a first data set stored in the non-volatile memory associated with utilizing the database computer server, based on the list of segment identifiers, the start date and time, and the end date and time, a first computer wherein the first data set includes data collected from at least one sensor over a first predetermined time interval;
 - sending a second data request message from the database computer server to a data acquisition computer server if a portion of the data requested by the first data request message has the end date and time after the first predetermined time interval;
 - retrieving a second data set stored in the volatile memory associated with utilizing the data acquisition computer server, based on the list of segment identifiers, the start date and time, and the end date and time, a second computer wherein the second data set comprises data collected from the at least one sensor over a second time interval after the first time interval; and,
 - sending a first data return message from the data acquisition computer server to the database computer server, the first data return message having the second data set;
 - sending a second data return message from the database computer server to the client computer, the second data return message having the second data set; and
 - storing at least a portion of the first data set and the second data set in a first memory, utilizing the client computer.

2. (Original): The method of claim 1 wherein the first data set corresponds to values obtained from a plurality of sensor signals measuring operating parameters associated with a plurality of devices in a plant or processing facility.

3. (Cancelled).

4. (Cancelled).

5. (Cancelled).

6. (Cancelled).

7. (Original): The method of claim 1 wherein the non-volatile memory comprises a hard drive and the volatile memory comprises random-access memory.

8. (Currently Amended): The method of claim 1 further comprising generating a graphical plot of at least a portion of the first data set and the second data set on a computer monitor, utilizing the client computer.

9. (Currently Amended): The method of claim 1 further comprising generating a data report based on at least a portion of the first data set and the second data set, utilizing the client computer.

10. (Currently Amended): The method of claim 1 further comprising exporting at least a portion of the first data set and the second data set to a first software application, utilizing the client computer.

11. (Currently Amended): A method for obtaining and displaying data stored in a non-volatile memory and data stored in volatile memory in a facility monitoring system, comprising:

sending a first data request message from a client computer to a database computer server requesting data, the first data request message having a list of segment identifiers, a start date and time, and an end date and time;

retrieving a first data set stored in the non-volatile memory associated with utilizing the database computer server, based on the list of segment identifiers, the start date and time, and the end date and time, a first computer wherein the first data set includes data collected from at least one sensor over a first predetermined time interval;

sending a second data request message from the database computer server to a data acquisition computer server if a portion of the data requested by the first data request message has the end date and time after the first predetermined time interval;

retrieving a second data set stored in the volatile memory associated with utilizing the data acquisition computer server, based on the list of segment identifiers, the start date and time, and the end date and time, a second computer wherein the second data set comprises data collected from the at least one sensor over a second time interval after the first time interval; and,

sending a first data return message from the data acquisition computer server to the database computer server, the first data return message having the second data set;

sending a second data return message from the database computer server to the client computer, the second data return message having the second data set; and

concurrently displaying at least a portion of the first data set and the second data set on a computer monitor, utilizing the client computer.

12. (Currently Amended): A facility monitoring system for obtaining data stored in a non-volatile memory and data stored in a volatile memory, comprising:

a client computer configured to send a first data request message to a database computer server requesting data, the first data request message having a list of segment identifiers, a start date and time, and an end date and time;

the database computer server configured to retrieve a first data set stored in the non-volatile memory, based on the list of segment identifiers, the start date and time, and the end date and time, wherein the first data set includes data collected from at least one sensor over a first predetermined time interval;

the database computer server further configured to send a second data request message to a data acquisition computer server if a portion of the data requested by the first data request message has the end date and time after the first predetermined time interval;

the data acquisition computer server configured to retrieve a second data set stored in the volatile memory, based on the list of segment identifiers, the start date and time, and the end date and time, wherein the second data set comprises data collected from the at least one sensor over a second time interval after the first time interval;

the data acquisition computer server further configured to send a first data return message to the database computer server, the first data return message having the second data set;

the database computer server further configured to send a second data return message to the client computer, the second data return message having the second data set; and

the client computer further configured to store at least a portion of the first data set and the second data set in a first memory

~~a first computer operatively associated with the non-volatile memory storing a first data set, the first data set having data collected from at least one sensor over a first time interval;~~

~~a second computer having the volatile memory storing a second data set having data collected from the at least one sensor over a second time interval after the first time interval; and,~~

~~a third computer configured to receive the first and second data sets from at least one of the first and second computers and to store at least a portion of the first and second data sets in a first memory.~~

13. (Original): The system of claim 12 wherein the first data set corresponds to values obtained from a plurality of sensor signals measuring operating parameters associated with a plurality of devices.

14. (Cancelled).

15. (Cancelled).

16. (Cancelled).

17. (Cancelled).

18. (Original): The system of claim 12 wherein the non-volatile memory comprises a hard drive and the volatile memory comprises a random-access memory.

19. (Currently Amended): The system of claim 12 wherein the ~~third~~ client computer is further configured to generate a graphical plot of at least a portion of the first data set and the second data set on the computer monitor.

20. (Currently Amended): A facility monitoring system for obtaining and displaying data stored in a non-volatile memory and data stored in a volatile memory, comprising:

a client computer configured to send a first data request message to a database computer server requesting data, the first data request message having a list of segment identifiers, a start date and time, and an end date and time;

the database computer server configured to retrieve a first data set stored in the non-volatile memory, based on the list of segment identifiers, the start date and time, and the end date and time, wherein the first data set includes data collected from at least one sensor over a first predetermined time interval;

the database computer server further configured to send a second data request message to a data acquisition computer server if a portion of the data requested by the first data request

message has the end date and time after the first predetermined time interval;

the data acquisition computer server configured to retrieve a second data set stored in the volatile memory, based on the list of segment identifiers, the start date and time, and the end date and time, wherein the second data set comprises data collected from the at least one sensor over a second time interval after the first time interval;

the data acquisition computer server further configured to send a first data return message to the database computer server, the first data return message having the second data set;

the database computer server further configured to send a second data return message to the client computer, the second data return message having the second data set; and

the client computer further configured to concurrently display at least a portion of the first and second data sets on a computer monitor

~~a first computer operatively associated with the non-volatile memory storing a first data set, the first data set having data collected from at least one sensor over a first time interval;~~

~~a second computer having the volatile memory storing a second data set having data collected from the at least one sensor over a second time interval after the first time interval; and,~~

~~a third computer configured to receive the first and second data sets from at least one of the first and second computers and to concurrently display at least a portion of the first and second data sets.~~

21. (Cancelled).

22. (Currently Amended): An article of manufacture, comprising:

a computer storage medium having a computer program encoded therein for obtaining data stored in a non-volatile memory and data stored in volatile memory in a facility monitoring system, the computer storage medium including:

code for sending a first data request message from a client computer to a database computer server requesting data, the first data request message having a list of segment identifiers, a start date and time, and an end date and time;

code for retrieving a first data set stored in the non-volatile memory utilizing the database computer server, based on the list of segment identifiers, the start date and time, and the end date

and time, wherein the first data set includes data collected from at least one sensor over a first predetermined time interval;

code for sending a second data request message from the database computer server to a data acquisition computer server if a portion of the data requested by the first data request message has the end date and time after the first predetermined time interval;

code for retrieving a second data set stored in the volatile memory utilizing the data acquisition computer server, based on the list of segment identifiers, the start date and time, and the end date and time, wherein the second data set comprises data collected from the at least one sensor over a second time interval after the first time interval;

code for sending a first data return message from the data acquisition computer server to the database computer server, the first data return message having the second data set;

code for sending a second data return message from the database computer server to the client computer, the second data return message having the second data set; and

code for storing at least a portion of the first data set and the second data set in a first memory, utilizing the client computer

~~code for retrieving a first data set stored in the non-volatile memory associated with a first computer wherein the first data set includes data collected from at least one sensor over a first predetermined time interval;~~

~~code for retrieving a second data set stored in the volatile memory associated with a second computer wherein the second data set comprises data collected from the at least one sensor over a second time interval after the first time interval; and,~~

~~code for storing at least a portion of the first data set and the second data set in a first memory.~~

23. (Original): A facility monitoring system, comprising:

a computer including a non-volatile memory and a volatile memory, the computer configured to store a first data set in the non-volatile memory, the first data set having data collected from at least one sensor over a first time interval, the computer further configured to store in the volatile memory a second data set having data collected from the at least one sensor over a second time interval after the first time interval, the computer further configured to retrieve the first data set from the non-volatile memory and the second data set from the volatile memory and to store the first and second data sets in either the volatile memory or a first memory.